

Claims

- [c1] 1. A reticle having:
a device pattern formed in an exposure area; and
evaluation pattern(s) formed in an area different from
said exposure area, for evaluating transferability onto a
transfer target of any defect in said exposure area.
- [c2] 2. The reticle according to claim 1, wherein said evaluation pattern has a defect of which transferability onto said transfer target being already evaluated.
- [c3] 3. The reticle according to claim 1, wherein said evaluation patterns are provided corresponding to types of defects possibly generated in said exposure area, and arranged by types of said defect.
- [c4] 4. The reticle according to claim 3, wherein a plurality of said evaluation patterns individually having different defect sizes are arranged by said types of defect.
- [c5] 5. The reticle according to claim 3, wherein said evaluation patterns, respectively having an untransferable largest defect size, are arranged by said types of defect.
- [c6] 6. The reticle according to claim 3, wherein said type of

said defect is at least any one of chipping, projection, short-circuiting, line breakage, isolated residue and isolated pinhole.

[c7] 7. A reticle inspection method comprising:
a pattern forming step for forming a device pattern in an exposure area, and also for forming evaluation pattern(s) for evaluating transferability of any defect onto a transfer target in said exposure area, in an area different from said exposure area on the same reticle;
a defect inspection step for inspecting presence or absence of any defect in said exposure area on said reticle;
and
an evaluation step for evaluating transferability onto said transfer target of any defect detected in said defect inspection step, based on said detected defect and said evaluation pattern.

[c8] 8. The reticle inspection method according to claim 7, wherein said evaluation pattern is a pattern having a defect possibly generated in said exposure area, and the method further comprising a preliminary evaluation step for evaluating, in advance to said pattern formation step, the transferability of said evaluation pattern onto said transfer target.

[c9] 9. The reticle inspection method according to claim 7,

wherein said evaluation step comprises:

a comparison step for comparing any defect detected in said defect inspection step with said evaluation pattern;

and

a correction judging step for judging necessity of correction of said detected defect based on a comparative result obtained from said comparison step.

[c10] 10. The reticle inspection method according to claim 9, wherein,

in said pattern forming step, said evaluation patterns corresponded to types of defects possibly generated in said exposure area on said reticle are formed on said reticle by types of said defect; and

in said comparison step, any defect detected in the defect inspection step is compared with said evaluation patterns corresponded to said types of defect and respectively having an untransferable largest defect size.

[c11] 11. The reticle inspection method according to claim 9, further comprising an information entering step for entering an information on any defect judged, in said correction judging step, as being in need of correction.

[c12] 12. The reticle inspection method according to claim 7, wherein,

in said pattern forming step, said evaluation patterns

corresponded to the individual types of defect possibly generated in said exposure area on said reticle are formed by said types of defect on said reticle; and in said evaluation step, transferability of any defect detected in said defect inspection step onto said transfer target is evaluated based on said defect detected in said defect inspection step and on said evaluation pattern corresponded to said types of said detected defect.

[c13] 13. A reticle inspection method comprising:
a defect inspection step for inspecting presence or absence of any defect in an exposure area on a reticle, said reticle having formed thereon a device pattern in said exposure area, and evaluation pattern(s) for evaluating transferability of any defect onto a transfer target in said exposure area, in an area different from said exposure area; and
an evaluation step for evaluating transferability onto said transfer target of any defect detected in said defect inspection step, based on said defect detected in said defect inspection step and on said evaluation pattern.

[c14] 14. The reticle inspection method according to claim 13, wherein said evaluation step comprises:
a comparison step for comparing any defect detected in said defect inspection step with said evaluation pattern;
and

a correction judging step for judging necessity of correction of said detected defect based on a comparative result obtained from said comparison step.

[c15] 15. A reticle inspection apparatus comprising:
an inspection section for inspecting presence or absence of any defect in an exposure area on a reticle, said exposure area having a device pattern formed therein; and
an evaluation section for evaluating transferability onto a transfer target of any defect detected by said inspection section, based on said detected defect, and on an evaluation pattern for evaluating transferability of said defect onto the transfer target, formed in an area different from said exposure area on the same reticle.

[c16] 16. The reticle inspection device according to claim 15, wherein said evaluation section compares any defect detected by said inspection section with said evaluation pattern, and judges whether correction of said detected defect is necessary or not based on a comparative result.